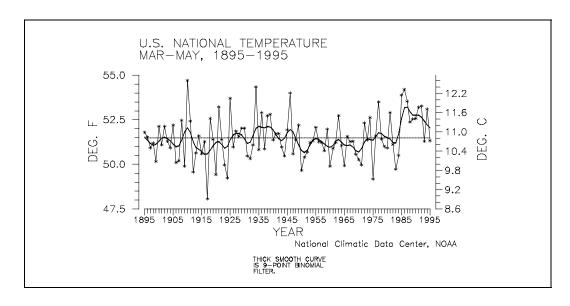
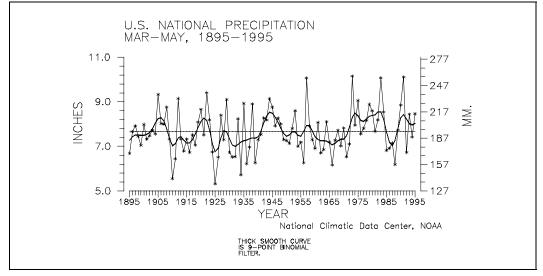
## **CLIMATE VARIATIONS BULLETIN**







This CLIMATE VARIATIONS BULLETIN (CVB) is a preliminary report that puts current monthly climate anomalies into historical perspective using climate databases archived at the National Climatic Data Center (NCDC). It is issued on a monthly basis. Supplemental sections are included which address seasonal and annual perspectives, when appropriate.

Current data are based on preliminary reports from First and Second Order airport stations obtained from the National Weather Service (NWS) Climate Analysis Center, and preliminary tornado statistics obtained from the NWS National Severe Storms Forecast Center. THE CURRENT DATA SHOULD BE USED WITH CAUTION. These preliminary data are useful for estimating how current anomalies compare to the historical record, however the actual values and rankings for the current year will change as the final data arrive at NCDC and are processed.

The following NCDC datasets are used for the historical data: the climate division drought database (TD-9640), the hurricane datasets (TD-9636 and TD-9697), the tornado dataset (STORM DATA), and the monthly station dataset (LCD supplemental files). It should be noted that the climate division drought database consists of monthly data for 344 climate divisions in the contiguous United States. These divisional values are calculated from the 6000+ station Cooperative Observer network.

The narrative, tables, and graphs in the CVB are also available via automated facsimile. The previous month's summary can be obtained after the tenth of the month by dialing 704-271-4570 and selecting the appropriate menu codes. A touch-tone fax machine is required.

If you have access to the Internet, copies of the CVB are available via both the NCDC's World Wide Web (WWW) server and the NCDC's anonymous FTP server.

NCDC's WWW server

URL for the CVB: http://www.ncdc.noaa.gov/publications/cvb/cvb.html

NCDC's anonymous FTP server

Machine: ftp.ncdc.noaa.gov Directory: /pub/data/cvb

If you are a climate researcher and would like to order copies of the historical datasets used to make graphs of the type in this report, call 704-271-4994 or fax a letter to 704-271-4876 or mail a letter to the address given below, ATTN: Research User Services.

All other questions or requests for data should be made by calling 704-271-4800 or sending a fax to 704-271-4876 or by writing to:

National Climatic Data Center, NOAA
Federal Building
151 Patton Avenue, Room 120
Asheville, NC 28801-5001

If you use any of the information from this CVB, please identify "National Climatic Data Center, NOAA" as the source.

# UNITED STATES MAY CLIMATE IN HISTORICAL PERSPECTIVE

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Preliminary data for May 1995 indicate that temperature averaged across the contiguous United States was below the long-term mean (see Figure 1). May 1995, with an averaged temperature of 59.5° (F), ranked as the 17th coolest May since national records began in 1895. The 1995 value is based on preliminary data, which has been shown to be within 0.26°F (0.14°C) of the final data over a 46-month period. This confidence interval is indicated in the figure by '+'. The darker smooth curve is a nine-point binomial filter that averages out the year-to-year fluctuations and shows the longer-term variations. Only 6.5% of the country averaged much warmer than normal while 19.6% of the country averaged much colder than normal for May 1995.

Areally-averaged precipitation for the nation was above the long-term mean, ranking May 1995 as the 16th wettest May on record. The preliminary value for precipitation is estimated to be accurate to within 0.14 inches (3.56 millimeters) and the confidence interval is plotted in Figure 2 as a '+'. Over a fifth (21.4%) of the country experienced much wetter than normal conditions while 11.9% was much drier than normal.

Historical precipitation is shown in a different way in Figure 3. The May precipitation for each climate division in the contiguous U.S. was first standardized using the gamma distribution over the 1931-90 period. These gamma-standardized values were then weighted by area and averaged to determine a national standardized precipitation value. These national weighted values were then normalized over their period of record. Negative values are drier and positive values are wetter than the mean. This index gives a more accurate indication of how precipitation across the country compares to the local normal (60-year The national standardized average) climate. precipitation ranked May 1995 as the 22nd wettest such month on record.

In order to show more of a historical perspective, the precipitation and temperature rankings for the periods May 1995, April-May 1995, December 1994-May 1995, and June 1994-May 1995 for the nine climatically homogeneous regions, as well as the national rankings, are listed in Table 1.

The regional rankings for temperature for the month of May indicate that the Southwest region had their ninth coolest May since 1895. It was the 17th coolest May for the West-North Central region and the 23rd coolest May for the West region. To the other extreme, it was the 24th warmest May since records began for the Southeast region and the 32nd warmest May since 1895 for the Northwest region.

Episodic events of stalled frontal systems along with numerous waves of low pressure allowed for the wettest May on record for the Central region (Figure 11). The Central region includes the states of Kentucky, Illinois, Indiana, Missouri, Ohio, Tennessee, and West Virginia. Flood crests along the lower Missouri river approached those recorded during the flood of 1993. This same synoptic situation aided in providing the 13th wettest May on record for the Southwest region and the 15th wettest May since 1895 for the West-North Central region. May 1995 was the 21st driest such month in the 101-year period of record for the Southeast region (Figure 12) and makes four successive years of below normal May precipitation.

National averaged temperature for the five month period January-May for 1895-1995 is shown in Figure 4. The January-May 1995 temperature was much above the long-term mean ranking as the 17th warmest such period since 1895. Six of the last ten such January through May periods have had temperatures much above the long-term mean.

Figure 5 shows the historical January-May national averaged precipitation. In 1995 this was the 17th wettest such five-month period since records began. When the local normal climate is taken into account, January-May 1995 ranked as the 23rd wettest such period since 1895 (Figure 6).

Figure 7A shows, in illustrative map form, the May 1995 temperature rankings for the 48 contiguous states. Six states were within the top ten cool of the historical distribution for the month of May including the third coolest May on record for Colorado and Utah. Thirteen other states were within the cool third of the historical distribution. It was the fifth warmest May on record for Florida and the seventh warmest May on record for Louisiana. Six others were within the warm third of the distribution.

May 1995 state ranks for precipitation are shown in Figure 7B. It was the wettest May on record for Illinois and Kansas, third wettest for Indiana, fourth wettest for Colorado and Missouri, seventh wettest for Kentucky, and eighth wettest for South Dakota, Utah, and Wyoming. Ten other states were within the wet third of the historical distribution. It was the ninth driest May since 1895 for Vermont while 13 other states were in the dry third of the distribution. It must be stressed that, when the final values for precipitation are calculated, these ranks WILL change due to the use of a denser station network. It should also be noted that the May state precipitation ranks are preliminary and should be used with considerable caution due to the high variability of precipitation on a small space and time scale.

State temperature and precipitation ranks for the five-month period, January-May 1995, are shown in map form in Figures 8A and 8B. It was the ninth warmest January-May on record for Oregon while 26 other states experienced January-May temperature rankings within the warm third of the historical distribution (Figure 8A). No states ranked within the top ten cool or within the cool third of the distribution for the five-month period. It was the second driest January-May period for New York, fifth driest for Pennsylvania, eighth driest such period for Vermont, the ninth driest January-May period on record for Maryland and New Jersey, and the tenth driest for Massachusetts (Figure 8B). Fourteen other states were within the dry third of the historical distribution for the January through May period. It was the second wettest year-to-date for California, fourth wettest for South Dakota, fifth wettest for Colorado and Nevada, sixth wettest for Kansas and Utah, eighth wettest for Illinois and ninth wettest year-to-date on record for lowa. Ten other states were within the wet third of the historical distribution.

There was a slight decrease in the national percent area of severe to extreme long-term drought during May 1995, while a sharp increase occurred in

the percentage of the country experiencing severe to extreme long-term wet spell. Nationally, long-term drought conditions (as defined by the Palmer Drought Index) for May 1995 decreased to 1.1% of the country while the percent coverage of severe to extreme wet area jumped to nearly a quarter of the country (24.5%, Figure 9). Table 2 lists the precipitation ranks and statistics for selected river basins for the 1994-1995 Hydrologic Year thus far. The core wet areas included the northern and central Great Plains, the middle Mississippi Valley and Delta regions, the central and southern Rockies, the Great Basin, and California. The Palmer dry areas included parts of the southern High Plains, western and southern Texas, patches of the interior Northwest, northern Rockies, mid-Atlantic, and southern New England, and portions of the Southeast.

Table 3 shows extremes, 1961-90 normals, and the May 1995 values for both precipitation and temperature for the nine regions and the contiguous U.S.

Precipitation averaged across the Primary Corn and Soybean Belt was much above normal for the three-month growing season to date (Figure 10).

According to preliminary data from the National Weather Service's National Severe Storms Forecast Center, there were a record 484 tornadoes across the contiguous United States in May 1995 (Figure 13). The 1953-1994 average tornado count for May is 171. Only 68 tornadoes were reported in May 1958. For the year-to-date, 708 tornadoes have occurred. The average tornado count for the January-May period is 366. The January-May extremes are 191 in 1958 and 740 in 1991. It should be noted that the preliminary tornado count is generally higher than the final count.

# UNITED STATES SPRING CLIMATE IN HISTORICAL PERSPECTIVE

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Preliminary spring (March-May) data for 1995 indicate that temperature averaged across the contiguous United States was near the long-term mean. For the nation, March-May 1995 was right at the median---51st warmest and 51st coolest spring on record (Table 4). The spring seasons of 1993 and 1995 marked a departure from the unusual warmth which dominated much of the last eleven years (see Figure 14). One twentieth (4.7%) of the contiguous U.S. averaged much warmer than normal, while about a twelfth (8.1%) averaged much colder than normal.

Areally-averaged March through May precipitation for the nation was above the long-term mean, ranking 1995 as the 21st wettest spring on record (see Table 4 and Figure 15). The national standardized precipitation index (Figure 16) also ranked 1995 as the 21st wettest spring on record (page 1 explains how this index is computed). The standardized precipitation index (Figure 16) provides a climatological perspective of the season's anomalies, taking local normal climate into account so that regions with large precipitation amounts do not dominate the index value. Areallyaveraged precipitation (Figure 15) provides a hydrological perspective. About one fifth (22.5%) of the country experienced much wetter than normal spring conditions while a tenth (10.7%) of the country was much drier than normal for spring 1995.

The temperature and precipitation ranks for spring 1995 for the nine climatically homogenous regions in the United States are listed in Table 4. Average spring precipitation followed a simple pattern, with the east coast regions ranking in the dry third of the historical distribution while the remaining regions ranked in the wet third of the distribution. The Northeast had the fourth driest spring on record in 1995, which was the driest since the mid-1960's (Figure 17), while the Southeast ranked twelfth driest. At the wet end of the spectrum, the West region had the second wettest spring on record, topped only by spring 1983 (Figure 18), and the West North Central ranked seventh wettest.

The regional temperatures for spring 1995 were a patchwork pattern, with the Southeast (Figure 19), Central, and Northwest regions ranking in the warm third of the distribution, the West North Central and Southwest in the cool third, and the remaining regions in the middle third of the historical distribution. Spring 1995 marked a departure from the persistent spring warmth of the previous ten years in the West North Central region (Figure 20).

On a statewide basis, nine states (CA, CO, IL, IA, KS, LA, NV, SD, and UT) ranked in the top ten wettest category for spring 1995, while nine other states (the east coast states of GA, MD, MA, NJ, NY, NC, PA, SC, and VT) ranked in the top ten driest category (see Figure 21B). Two states (AL and FL) ranked in the top ten warmest category while one (CO) ranked in the top ten coldest category for spring 1995 (see Figure 21A). Spring 1995 precipitation ranks for eighteen river basins in the contiguous U.S. are shown in Table 5.

According to preliminary data from the National Weather Service's National Severe Storms Forecast Center, there were 677 tornadoes across the contiguous United States during spring 1995, which is the second biggest spring tornado count in the last 43 years (Figure 22). The 1995 figure compares to the 1953-1994 average of 331. The extremes: 159 spring tornadoes in 1958, and 700 in 1991. It should be noted that the preliminary tornado count is generally higher than the final count and that the tornado observations have generally improved with time as better observing practices and instrumentation (especially weather radar and satellites) were utilized.

TABLE 1. PRECIPITATION AND TEMPERATURE RANKS, BASED ON THE PERIOD 1895-1995. 1 = DRIEST/COLDEST, 101 = WETTEST/WARMEST FOR MAY 1995, 101 = WETTEST/WARMEST FOR APR-MAY 1995, 100 = WETTEST/WARMEST FOR DEC 1994-MAY 1995, 100 = WETTEST/WARMEST FOR JUN 1994-MAY 1995.

REGION		MAY 1995		DEC 1994- MAY 1995	
	PRECIPITA	TION:			
NORTHEAST		22	10	4	14
EAST NORTH		57	60	49	79
CENTRAL		101	94	61	48
SOUTHEAST		21	10	28	84
WEST NORTH		87	87	80	86
SOUTH		80	74	69	67
SOUTHWEST		89	81	85	66
NORTHWEST		26	35	50	33
WEST		74	69	96	96
NATIONAL		86	70	72	77
	TEMPERATU	RE:			
NORTHEAST	CENTRAL	44	20	87	92
EAST NORTH		43	16	83	90
CENTRAL		39	38	78	80
SOUTHEAST		78	83	81	78
WEST NORTH		17	11	73	77
SOUTH		39	37	77	81
SOUTHWEST		9	5	86	92
NORTHWEST		70	53	90	92
WEST		23	28	75	75
NATIONAL		17	16	93	92

TABLE 2.

STATISTICS FOR SELECTED RIVER BASINS: PRECIPITATION RANKING FOR OCT-MAY 1994-95, WHERE RANK OF 1 = DRIEST, 100 = WETTEST, BASED ON THE PERIOD 1895 TO 1995, AREAL PERCENT OF THE BASIN EXPERIENCING SEVERE OR EXTREME LONG-TERM (PALMER) DROUGHT, AND AREAL PERCENT OF THE BASIN EXPERIENCING SEVERE OR EXTREME LONG-TERM (PALMER) WET CONDITIONS, AS OF MAY 1995. RIVER BASIN REGIONS AS DEFINED BY THE U.S. WATER RESOURCES COUNCIL.

RIVER BASIN	PRECIPITATION RANK		
MISSOURI BASIN PACIFIC NORTHWEST BASIN CALIFORNIA RIVER BASIN		.0% 2.2% .0%	7.1%
GREAT BASIN UPPER COLORADO BASIN LOWER COLORADO BASIN RIO GRANDE BASIN	99 90 89 67	.0% .0% .0% 12.7%	6.6% 71.6%
ARKANSAS-WHITE-RED BASIN TEXAS GULF COAST BASIN SOURIS-RED-RAINY BASIN UPPER MISSISSIPPI BASIN	80 91 93 89	.0% .0% .0%	.0% 73.9%
LOWER MISSISSIPPI BASIN GREAT LAKES BASIN OHIO RIVER BASIN TENNESSEE RIVER BASIN	61 22 46 37	.0% .0% .4% .0%	.0%
NEW ENGLAND BASIN MID-ATLANTIC BASIN SOUTH ATLANTIC-GULF BASIN	10 3 62		.0% .0% 5.3%

TABLE 3. EXTREMES, 1961-90 NORMALS, AND 1995 VALUES FOR MAY

	PRECIPITATION (INCHES)					
					NORMAL	
					PCPN	PCPN
NORTHEAST	9.8	1903	7 25	1984	3 79	2 54
EAST NORTH CENTRAL						
CENTRAL					4.47	
				1000	4 0 1	0 7 6
SOUTHEAST					4.21	
WEST NORTH CENTRAL SOUTH					2.57 4.17	
SOUTHWEST	.19	1974	2.31	1992	1.01 1.79	1.50
NORTHWEST	.30	1924	3.67	1915	1.79	1.29
WEST	.07	1924	2.75	1915	.73	1.10
NIA TIT ONTA T	1 70	1024	<i>1</i> 1 F	1057	2 01	2 20
NATIONAL	1./8	1934	4.15	1957	2.91	3.38
	TI	EMPERA	ATURE	( DEGRE	ES F)	
	COLI	DEST	WARI	MEST	CES F) NORMAL	1995
REGION	COLI	DEST	WARI VALUE	MEST YEAR	NORMAL TEMP	1995 TEMP
REGION	COLI	DEST	WARI	MEST YEAR	NORMAL	1995 TEMP
REGION 	COLI VALUE	DEST YEAR	WARI VALUE	MEST YEAR	NORMAL TEMP	TEMP
REGION NORTHEAST	COLI VALUE 	DEST YEAR 	WARN VALUE 	MEST YEAR 	NORMAL TEMP 	TEMP 
REGION 	COLI VALUE  48.7 46.8	DEST YEAR  1917 1907	WARN VALUE  61.7 63.7	MEST YEAR  1911 1977	NORMAL TEMP 	TEMP  55.4 54.8
REGION NORTHEAST EAST NORTH CENTRAL CENTRAL	COLI VALUE  48.7 46.8 56.7	YEAR  1917 1907 1917	WARN VALUE  61.7 63.7 69.8	YEAR 1911 1977 1962	NORMAL TEMP  55.5 56.0 62.8	TEMP  55.4 54.8 61.9
REGION NORTHEAST EAST NORTH CENTRAL CENTRAL SOUTHEAST	COLI VALUE  48.7 46.8 56.7 65.9	YEAR  1917 1907 1917	WARN VALUE  61.7 63.7 69.8 74.4	YEAR 1911 1977 1962 1896	NORMAL TEMP  55.5 56.0 62.8 69.3	TEMP  55.4 54.8 61.9 71.5
REGION NORTHEAST EAST NORTH CENTRAL CENTRAL SOUTHEAST WEST NORTH CENTRAL	COLI VALUE  48.7 46.8 56.7 65.9 47.2	YEAR  1917 1907 1917 1917 1907	WARN VALUE  61.7 63.7 69.8 74.4 62.6	YEAR 1911 1977 1962 1896 1934	NORMAL TEMP  55.5 56.0 62.8 69.3 53.7	TEMP  55.4 54.8 61.9 71.5 50.3
REGION NORTHEAST EAST NORTH CENTRAL CENTRAL SOUTHEAST	COLI VALUE  48.7 46.8 56.7 65.9 47.2	YEAR  1917 1907 1917 1917 1907	WARN VALUE  61.7 63.7 69.8 74.4 62.6	YEAR 1911 1977 1962 1896 1934	NORMAL TEMP  55.5 56.0 62.8 69.3	TEMP  55.4 54.8 61.9 71.5 50.3
REGION NORTHEAST EAST NORTH CENTRAL CENTRAL SOUTHEAST WEST NORTH CENTRAL	COLI VALUE  48.7 46.8 56.7 65.9 47.2 65.1	1917 1907 1917 1907 1917 1907 1907	WARN VALUE  61.7 63.7 69.8 74.4 62.6 75.3	YEAR 1911 1977 1962 1896 1934 1896	NORMAL TEMP  55.5 56.0 62.8 69.3 53.7 70.2	TEMP 55.4 54.8 61.9 71.5 50.3 69.7
REGION NORTHEAST EAST NORTH CENTRAL CENTRAL SOUTHEAST WEST NORTH CENTRAL SOUTH	COLI VALUE  48.7 46.8 56.7 65.9 47.2 65.1 51.7 47.7	YEAR  1917 1907 1917 1907 1907 1917 1896	WARN VALUE  61.7 63.7 69.8 74.4 62.6 75.3 64.3 58.5	MEST YEAR  1911 1977 1962 1896 1934 1896	NORMAL TEMP  55.5 56.0 62.8 69.3 53.7 70.2 58.8 52.3	TEMP 55.4 54.8 61.9 71.5 50.3 69.7 55.4 53.7
REGION NORTHEAST EAST NORTH CENTRAL CENTRAL SOUTHEAST WEST NORTH CENTRAL SOUTH	COLI VALUE  48.7 46.8 56.7 65.9 47.2 65.1 51.7 47.7	YEAR  1917 1907 1917 1907 1907 1917 1896	WARN VALUE  61.7 63.7 69.8 74.4 62.6 75.3 64.3 58.5	MEST YEAR  1911 1977 1962 1896 1934 1896	NORMAL TEMP  55.5 56.0 62.8 69.3 53.7 70.2	TEMP 55.4 54.8 61.9 71.5 50.3 69.7 55.4 53.7
REGION NORTHEAST EAST NORTH CENTRAL CENTRAL SOUTHEAST WEST NORTH CENTRAL SOUTH SOUTH SOUTHWEST NORTHWEST	COLI VALUE  48.7 46.8 56.7 65.9 47.2 65.1 51.7 47.7 53.5	1917 1907 1917 1907 1917 1907 1907 1907	WARN VALUE  61.7 63.7 69.8 74.4 62.6 75.3 64.3 58.5 65.6	YEAR 1911 1977 1962 1896 1934 1896 1934 1958 1992	NORMAL TEMP  55.5 56.0 62.8 69.3 53.7 70.2 58.8 52.3	TEMP 55.4 54.8 61.9 71.5 50.3 69.7 55.4 53.7 57.1

TABLE 4. TEMPERATURE AND PRECIPITATION RANKS FOR MAR-MAY 1995, BASED ON THE PERIOD 1895-1995. 1 = DRIEST/COLDEST, 101 = WETTEST/HOTTEST.

REGION	PRECIPITATION	TEMPERATURE
NORTHEAST	4	62
EAST NORTH CENTRAL	72	48
CENTRAL	77	73
SOUTHEAST	12	88
WEST NORTH CENTRAL	95	20
SOUTH	79	51
SOUTHWEST	83	24
NORTHWEST	69	68
WEST	100	42
NATIONAL	81	51

# TABLE 5. STATISTICS FOR SELECTED RIVER BASINS: PRECIPITATION RANKING FOR MAR-MAY 1995, WHERE RANK OF 1 = DRIEST, 101 = WETTEST, BASED ON THE PERIOD 1895 TO 1995. RIVER BASIN REGIONS AS DEFINED BY THE U.S. WATER RESOURCES COUNCIL.

RIVER BASIN	PRECIPITATION RANK
MISSOURI BASIN	100
PACIFIC NORTHWEST BASIN	69
CALIFORNIA RIVER BASIN	99
GREAT BASIN UPPER COLORADO BASIN LOWER COLORADO BASIN RIO GRANDE BASIN	98 98 63 40
ARKANSAS-WHITE-RED BASIN	71
TEXAS GULF COAST BASIN	74
SOURIS-RED-RAINY BASIN	68
UPPER MISSISSIPPI BASIN	93
LOWER MISSISSIPPI BASIN	77
GREAT LAKES BASIN	20
OHIO RIVER BASIN	61
TENNESSEE RIVER BASIN	53
NEW ENGLAND BASIN	8
MID-ATLANTIC BASIN	4
SOUTH ATLANTIC-GULF BASIN	15

## U.S. NATIONAL TEMPERATURE MAY, 1895-1995

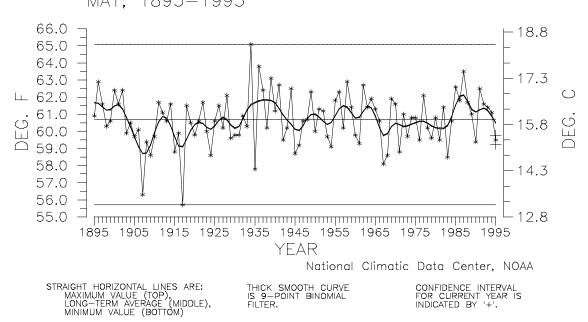


Figure 1

U.S. NATIONAL PRECIPITATION MAY, 1895-1995

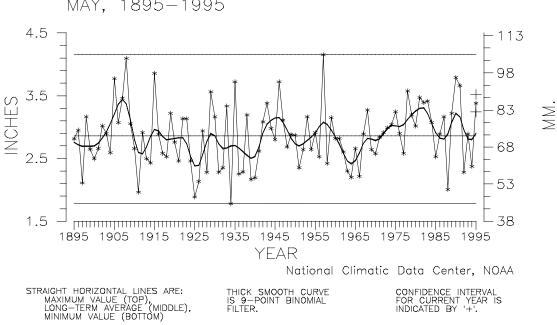
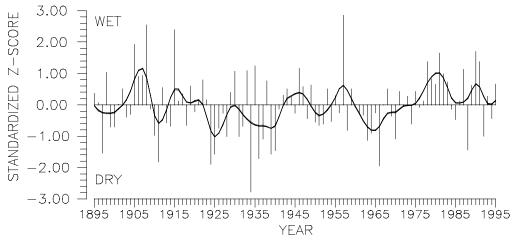


Figure 2

U.S. NATIONAL NORMALIZED PRECIPITATION INDEX MAY, 1895-1995

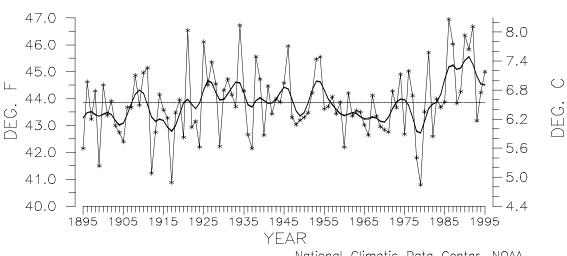


National Climatic Data Center, NOAA

THICK SMOOTH CURVE IS 9-POINT BINOMIAL FILTER.

Figure 3

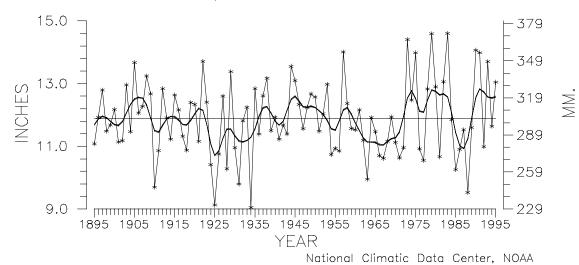
U.S. NATIONAL TEMPERATURE JANUARY-MAY, 1895-1995



National Climatic Data Center, NOAA

Figure 4

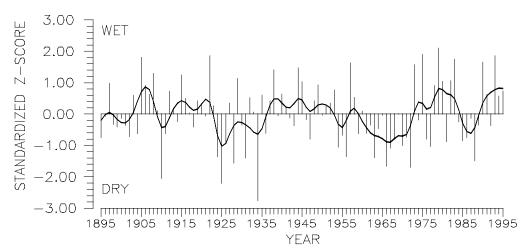
## U.S. NATIONAL PRECIPITATION JANUARY-MAY, 1895-1995



THICK SMOOTH CURVE IS 9-POINT BINOMIAL FILTER.

Figure 5

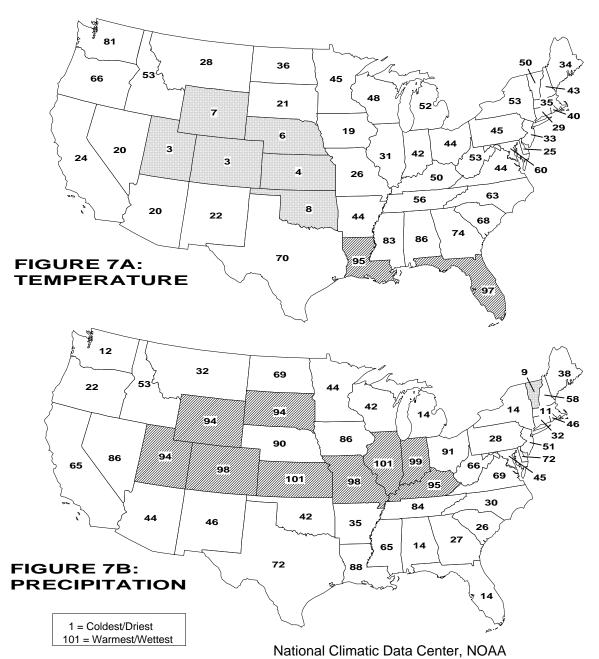
U.S. NATIONAL NORMALIZED PRECIPITATION INDEX JANUARY-MAY, 1895-1995



National Climatic Data Center, NOAA

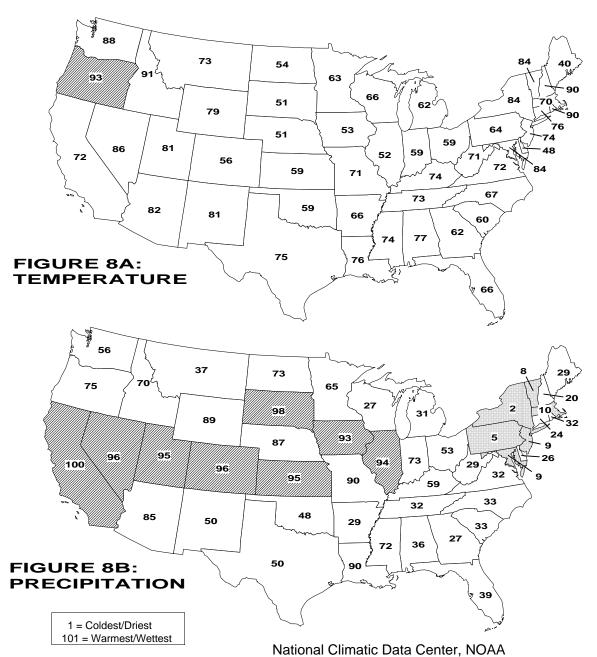
Figure 6

### **MAY 1995 STATEWIDE RANKS**



Temperature and Precipitation Ranks for the contiguous United States. Each state is ranked based on its data from 1895-1995. States having a rank of top ten coldest or driest (rank 1-10) or top ten warmest or wettest (rank 92-101) are shaded.

## **JAN-MAY 1995 STATEWIDE RANKS**



Temperature and Precipitation Ranks for the contiguous United States. Each state is ranked based on its data from 1895-1995. States having a rank of top ten coldest or driest (rank 1-10) or top ten warmest or wettest (rank 92-101) are shaded.

#### U.S. PERCENT AREA DRY AND WET

JANUARY 1990 THROUGH MAY 1995

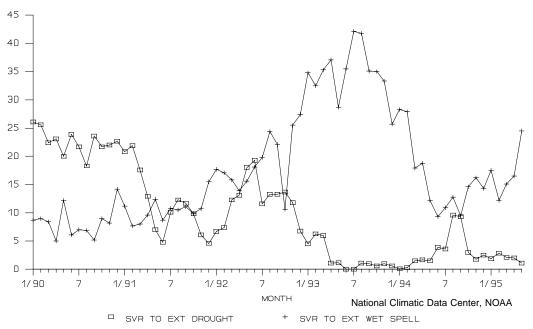
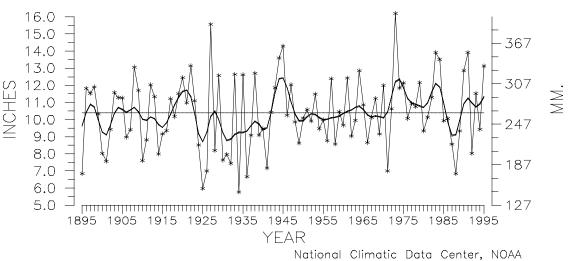


Figure 9

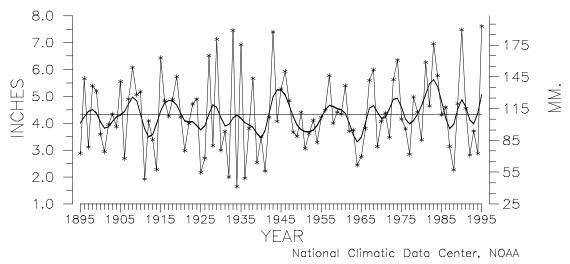




THICK SMOOTH CURVE IS 9-POINT BINOMIAL FILTER.

Figure 10

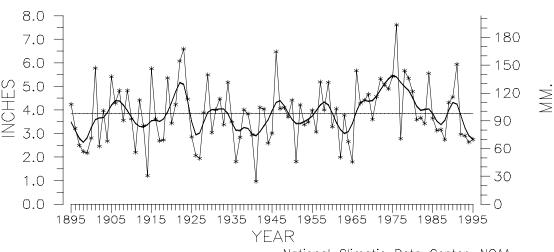




THICK SMOOTH CURVE IS 9-POINT BINOMIAL FILTER.

Figure 11

## SOUTHEAST REGION PRECIPITATION MAY, 1895-1995



National Climatic Data Center, NOAA

Figure 12

#### NUMBER OF OBSERVED TORNADOES, U.S.A.

MAY & JANUARY-MAY, 1959-1995

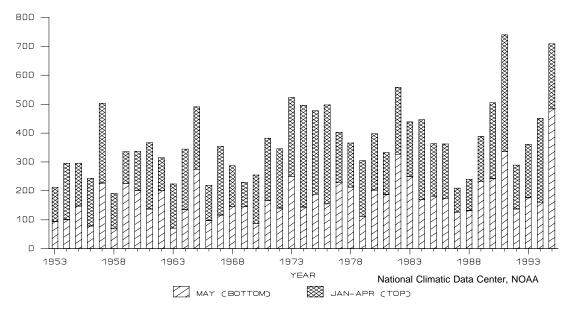


Figure 13

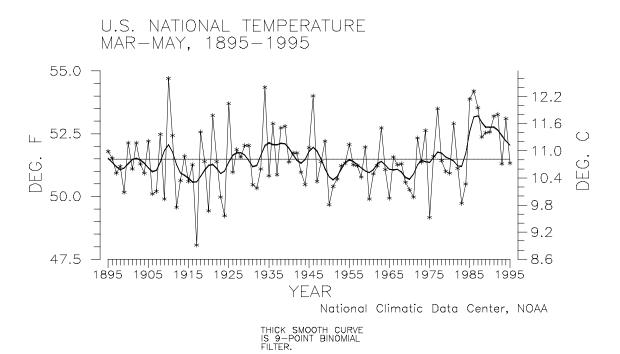


Figure 14

U.S. NATIONAL PRECIPITATION MAR-MAY, 1895-1995

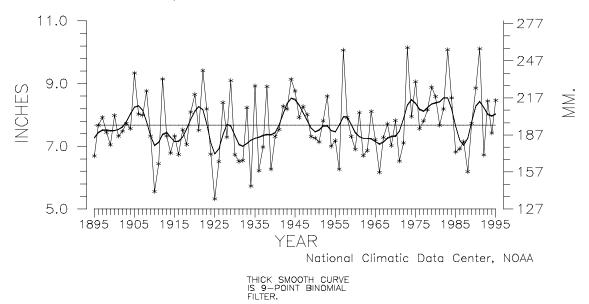
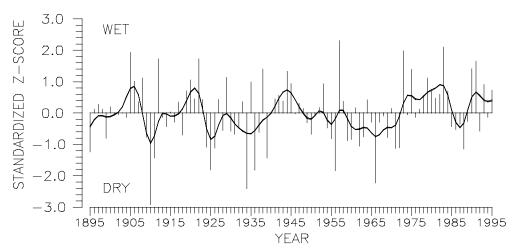


Figure 15

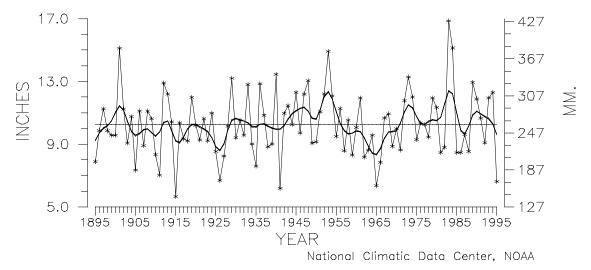
U.S. NATIONAL NORMALIZED PRECIPITATION INDEX MAR-MAY, 1895-1995



National Climatic Data Center, NOAA

Figure 16





THICK SMOOTH CURVE IS 9-POINT BINOMIAL FILTER.

Figure 17

WEST REGION PRECIPITATION MAR-MAY, 1895-1995

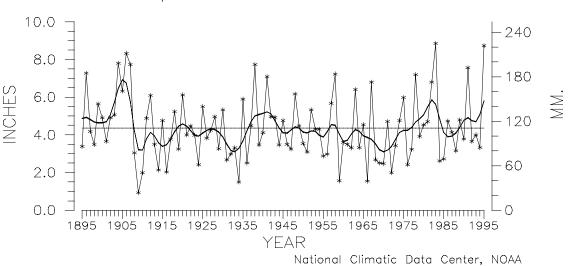
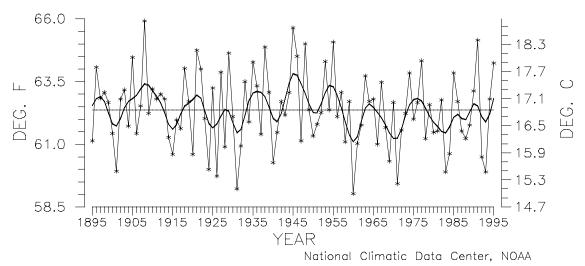


Figure 18

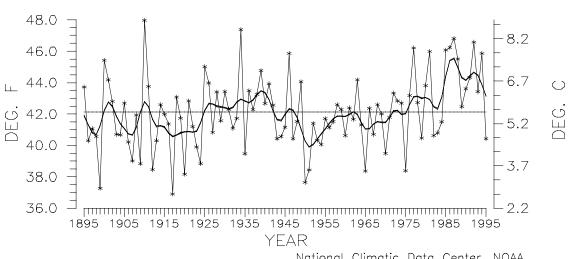




THICK SMOOTH CURVE IS 9-POINT BINOMIAL FILTER.

Figure 19

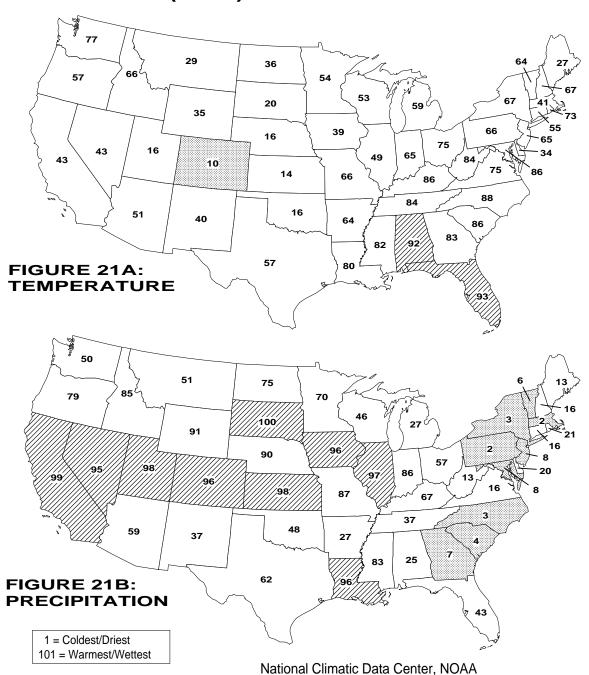
WEST NORTH CENTRAL REGION TEMPERATURE MAR-MAY, 1895-1995



National Climatic Data Center, NOAA

Figure 20

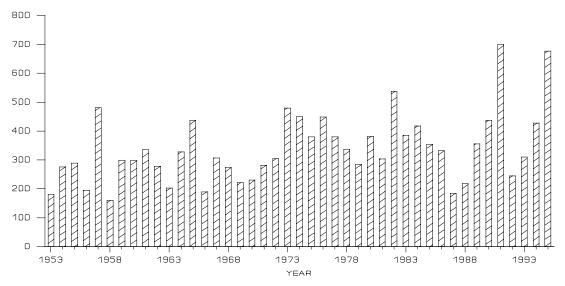
## **SPRING (MAM) 1995 STATEWIDE RANKS**



Temperature and Precipitation Ranks for the contiguous United States. Each state is ranked based on its data from 1895-1995. States having a rank of top ten coldest or driest (rank 1-10) or top ten warmest or wettest (rank 92-101) are shaded.

#### NUMBER OF OBSERVED TORNADOES, U.S.A.

SPRING (MAM) TOTAL, 1953-1995



National Climatic Data Center, NOAA

Figure 22